What is claimed is:

1. A hydrogen supplying device for a fuel cell, comprising:

a hydrogen occlusion tank in which a hydrogen occlusion alloy is contained, said hydrogen occlusion alloy being capable of occluding and discharging hydrogen which is used as a fuel for said fuel cell;

a hydrogen tank in which hydrogen to be supplied to said fuel cell can be stored in a compressed state;

a heating unit which supplies heat to said hydrogen occlusion tank to discharge hydrogen from said hydrogen occlusion alloy;

a hydrogen supply line through which a flow of hydrogen supplied from said hydrogen occlusion tank and a flow of hydrogen supplied from said hydrogen tank can be merged to be supplied to said fuel cell; and

a flow rate controlling device which controls a flow rate of hydrogen supplied from said hydrogen occlusion tank and a flow rate of hydrogen supplied from said hydrogen tank.

2. A hydrogen supplying device for a fuel cell according to claim 1, wherein

said flow rate controlling device controls the flow rate of hydrogen supplied from said hydrogen occlusion tank and the flow rate of hydrogen supplied from said hydrogen tank depending on the temperature of said hydrogen occlusion tank.

3. A hydrogen supplying device for a fuel cell according to claim 2, wherein

hydrogen is supplied to said fuel cell only from said hydrogen tank when the temperature of said hydrogen occlusion tank is lower than a lower limit temperature, and

hydrogen is supplied to said fuel cell from said hydrogen occlusion tank when the

temperature of said hydrogen occlusion tank is equal to or higher than the lower limit temperature.

4. A hydrogen supplying device for a fuel cell according to claim 2, wherein

hydrogen is supplied to said fuel cell only from said hydrogen occlusion tank when the temperature of said hydrogen occlusion tank is higher than an upper limit temperature.

5. A hydrogen supplying device for a fuel cell according to claim 2, wherein

said flow rate controlling device is controlled depending on a rate of change in the temperature of said hydrogen occlusion tank when the temperature of said hydrogen occlusion tank is equal to or higher than a lower limit temperature and is equal to or lower than a higher limit temperature.

6. A hydrogen supplying device for a fuel cell according to claim 5, wherein

said flow rate controlling device is controlled so that hydrogen is supplied to said fuel cell only from said hydrogen occlusion tank when the rate of change in the temperature of said hydrogen occlusion tank is increasing, and

said flow rate controlling device is controlled so that hydrogen is supplied to said fuel cell from both said hydrogen occlusion tank and said hydrogen tank when the rate of change in the temperature of said hydrogen occlusion tank is decreasing.

7. A hydrogen supplying device for a fuel cell according to claim 1, wherein

said flow rate controlling device is controlled depending on the rate of change in the temperature of said hydrogen occlusion tank.

8. A hydrogen supplying device for a fuel cell according to claim 7, wherein

said flow rate controlling device controls the flow rate of hydrogen so that the rate of change in temperature of said hydrogen occlusion tank becomes substantially zero.

9. A hydrogen supplying device for a fuel cell according to claim 1, wherein

said flow rate controlling device is controlled depending on the temperature of said hydrogen occlusion tank and the rate of change in the temperature of said hydrogen occlusion tank.

10. A hydrogen supplying device for a fuel cell, comprising:

a hydrogen occlusion tank in which a hydrogen occlusion alloy is contained, said hydrogen occlusion alloy being capable of occluding and discharging hydrogen which is used as a fuel for said fuel cell;

a hydrogen tank in which hydrogen to be supplied to said fuel cell can be stored in a compressed state;

a heating unit which supplies heat to said hydrogen occlusion tank to discharge hydrogen from said hydrogen occlusion alloy;

a hydrogen supply line through which a flow of hydrogen supplied from said hydrogen occlusion tank and a flow of hydrogen supplied from said hydrogen tank can be merged to be supplied to said fuel cell; and

a flow rate controlling device which controls a flow rate of hydrogen supplied from said hydrogen tank depending on a flow rate of hydrogen supplied from said hydrogen occlusion tank.

11. A hydrogen supplying device for a fuel cell according to claim 10, wherein

said flow rate controlling device controls the flow rate of hydrogen supplied from said hydrogen tank so that the total of the flow rate of hydrogen supplied from said hydrogen occlusion tank and the flow rate of hydrogen supplied from said hydrogen tank becomes a flow rate of hydrogen required by said fuel cell.

12. A hydrogen supplying device for a fuel cell according to claim 11, further comprising:

a quantity of heat calculation unit which calculates a quantity of heat for heating said hydrogen occlusion tank by said heating unit; and

a maximum discharging amount of hydrogen calculation unit which calculates a maximum amount of hydrogen that can be supplied from said hydrogen occlusion tank, based on the quantity of heat for heating said hydrogen occlusion tank calculated by said quantity of heat calculation unit, wherein

said flow rate controlling device controls the flow rate of hydrogen supplied from said hydrogen tank depending on the maximum discharging amount of hydrogen calculated by said maximum discharging amount of hydrogen calculation unit.

13. A hydrogen supplying device for a fuel cell according to claim 12, wherein

said flow rate controlling device controls so that hydrogen is not supplied from said hydrogen tank if the maximum discharging amount of hydrogen calculated by said maximum discharging amount of hydrogen calculation unit is sufficient for the flow rate of hydrogen required by said fuel cell.

14. A hydrogen supplying device for a fuel cell, comprising:

a hydrogen occlusion tank in which a hydrogen occlusion alloy is contained, said hydrogen occlusion alloy being capable of occluding and discharging hydrogen which is used

as a fuel for said fuel cell;

a heating unit which is used for heating said hydrogen occlusion tank by supplying a heating medium, which has been heated by using waste heat from said fuel cell and whose temperature is controllable, to said hydrogen occlusion tank to discharge hydrogen from said hydrogen occlusion alloy; and

a required quantity of heat calculation unit which calculates a quantity of heat required by said hydrogen occlusion tank based on an amount of hydrogen supplied from said hydrogen occlusion tank, wherein

said heating unit is controlled depending on the required quantity of heat calculated by said required quantity of heat calculation unit.

15. A hydrogen supplying device for a fuel cell according to claim 14, further comprising:

a target temperature calculation unit which calculates a target temperature of said heating medium based on the temperature of said hydrogen occlusion tank, wherein

said heating unit is controlled so that the temperature of said heating medium reaches the target temperature.

16. A hydrogen supplying device for a fuel cell according to claim 15, wherein

the target temperature of said heating medium is corrected based on a quantity of heat required by said heating unit for heating said hydrogen occlusion tank and the required quantity of heat calculated by said required quantity of heat calculation unit.

17. A hydrogen supplying device for a fuel cell according to claim 16, wherein

the rate of change in the temperature of said hydrogen occlusion tank is calculated based on the quantity of heat required by said heating unit and the required quantity of heat

calculated by said required quantity of heat calculation unit, and

a target temperature is corrected to be higher than the target temperature calculated by said target temperature calculation unit if the rate of change in the temperature of said hydrogen occlusion tank is decreasing, and a target temperature is corrected to be lower than the target temperature calculated by said target temperature calculation unit if the rate of change in the temperature of said hydrogen occlusion tank is increasing.